Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method comprising:

routing a set-up message to a plurality of nodes in at least one transport network, wherein said set-up message reserves network resources for multiple ~~a plurality of~~ different traffic paths through said at least one transport network as said set-up message visits each of said plurality of nodes; and

routing said set-up message to said plurality of nodes in said transport network, wherein said set-up message provisions said reserved network resources for the multiple ~~said plurality of~~ different traffic paths through said at least one transport network as said set-up message revisits each of said plurality of nodes;

wherein the reserved network resources for the multiple ~~said plurality of~~ different traffic paths through said at least one transport network are provisioned only if all of the resources needed for each of the multiple ~~traffic path of the plurality of~~ different traffic paths through said at least one transport network have been successfully reserved.

2. (currently amended) The method of claim 1 wherein at least one of the multiple ~~said plurality of~~ different traffic paths through said at least one transport network is a working path and wherein at least one of the multiple ~~said plurality of~~ different traffic paths through said at least one transport network is a protection path for said working path.

3. (original) The method of claim 1 wherein said set-up message revisits each of said plurality of nodes in the reverse order in which said set-up message visits each of said plurality of nodes.

4. (original) The method of claim 1 wherein said transport network is a mesh network.

5. (original) The method of claim 1 wherein said transport network is a ring network.

6. (currently amended) The method of claim 1 wherein at least one of the multiple ~~said plurality of~~ different traffic paths through said at least one transport network is a multicast traffic path.

7. (previously presented) The method of claim 1 wherein some of said plurality of nodes are in a first transport network and some of said nodes are in a second transport network.

8 – 15. (canceled)

16. (currently amended) A method comprising:

routing a set-up message to a plurality of nodes in at least one transport network, wherein said set-up message reserves network resources for multiple ~~a plurality of~~ different traffic paths through said at least one transport network as said set-up message visits each of said plurality of nodes; and

revisiting said plurality of nodes with one or more set-up messages, wherein said one or more set-up messages provision said reserved network resources for the multiple ~~said plurality of~~ different traffic paths through said at least one transport network as said one or more set-up messages revisit each of said plurality of nodes;

wherein the reserved network resources for the multiple ~~said plurality of~~ different traffic paths through said at least one transport network are provisioned only if all of the

resources needed for each of the multiple ~~traffic path of the plurality of~~ different traffic paths through said at least one transport network have been successfully reserved.

17. (currently amended) The method of claim 16 wherein at least one of the multiple ~~said plurality of~~ different traffic paths through said at least one transport network is a working path and wherein at least one of the multiple ~~said plurality of~~ different traffic paths through said at least one transport network is a protection path for said working path.

18. (currently amended) The method of claim 16 wherein at least one of the multiple ~~said plurality of~~ different traffic paths through said at least one transport network is a multicast traffic path.

19. (previously presented) The method of claim 16 wherein some of said plurality of nodes are in a first transport network and some of said nodes are in a second transport network.

20. – 23. (canceled)

24. (currently amended) A method comprising:

checking the nodes of multiple ~~a plurality of~~ proposed different traffic paths through at least one transport network to ensure that each node can provide the resources needed to establish the multiple proposed different traffic paths through said at least one transport network, wherein the nodes are checked by sending a set-up message to the nodes;

reserving, at each node, the resources needed to establish the multiple proposed different traffic paths through said at least one transport network if the resources are available; and

provisioning, at each node, the resources needed to establish each one of the multiple proposed different traffic paths through said at least one transport network only if all of the resources needed to establish each one of the multiple proposed different traffic paths through said at least one transport network have been successfully reserved.

25. (previously presented) The method of claim 24 wherein the nodes are checked one node after another.

26. (previously presented) The method of claim 24 wherein the set-up message includes an indication of the order in which to check the nodes.

27. (previously presented) The method of claim 26 wherein provisioning the resources comprises routing the set-up message to the nodes in the reverse order in which the nodes were checked.

28. (currently amended) The method of claim 1 wherein each of the multiple different traffic paths through said at least one transport network is a multi-hop path that comprises a different set of nodes.

29. (currently amended) The method of claim 1 wherein at least two of the different traffic paths through said at least one transport network connect a common pair of ~~the same two~~ nodes via different sets of intermediate nodes.

30. (currently amended) The method of claim 16 wherein each of the multiple different traffic paths through said at least one transport network is a multi-hop path that comprises a different set of nodes.

31. (currently amended) The method of claim 16 wherein at least two of the different traffic paths through said at least one transport network connect a common pair of ~~the same two~~ nodes via different sets of intermediate nodes.

32. (currently amended) The method of claim 24 wherein each of the multiple different traffic paths through said at least one transport network is a multi-hop path that comprises a different set of nodes.

33. (currently amended) The method of claim 24 wherein at least two of the different traffic paths through said at least one transport network connect a common pair of ~~the same two~~ nodes via different sets of intermediate nodes.